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**Product Name: GK1/3 Rabbit Polyclonal Antibody****Catalog #: APRab11453**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA
<b>Reactivity</b>	Human,Rat,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
<b>Molecular Weight</b>	61kDa

**Antigen Information**

<b>Gene Name</b>	GK/GK3P GK; Glycerol kinase; GK; Glycerokinase; ATP:glycerol 3-phosphotransferase; GK3P; GKP3;
<b>Alternative Names</b>	GKTB; Putative glycerol kinase 3; GK 3; Glycerokinase 3; ATP:glycerol 3-phosphotransferase 3; Glycerol kinase; testis specific 1
<b>Gene ID</b>	2713.0
<b>SwissProt ID</b>	P32189/Q14409
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human GK3. AA range:21-70

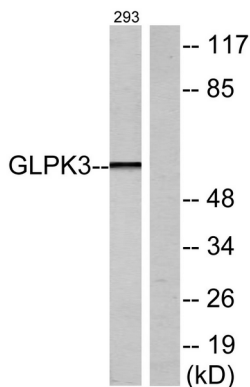
## Background

The protein encoded by this gene belongs to the FGGY kinase family. This protein is a key enzyme in the regulation of glycerol uptake and metabolism. It catalyzes the phosphorylation of glycerol by ATP, yielding ADP and glycerol-3-phosphate. Mutations in this gene are associated with glycerol kinase deficiency (GKD). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2011],catalytic activity:ATP + glycerol = ADP + sn-glycerol 3-phosphate.,caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,disease:Defects in GK are the cause of GK deficiency (GKD) [MIM:307030]. This disease can be either symptomatic with episodic metabolic and CNS decompensation or asymptomatic with hyperglycerolemia and hyperglyceroluria only.,function:Key enzyme in the regulation of glycerol uptake and metabolism.,pathway:Polyol metabolism; glycerol degradation via glycerol kinase pathway; sn-glycerol 3-phosphate from glycerol: step 1/1.,similarity:Belongs to the FGGY kinase family.,subcellular location:In sperm and fetal tissues, the majority of the enzyme is bound to mitochondria, but in adult tissues, such as liver found in the cytoplasm.,tissue specificity:Highly expressed in the liver, kidney and testis. Isoforms 2 and 3 are expressed specifically in testis and fetal liver, but not in the adult liver.,

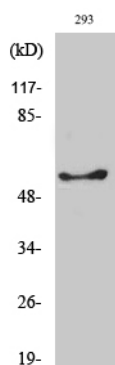
## Research Area

Glycerolipid metabolism;PPAR;

## Image Data



Western blot analysis of lysates from 293 cells, using GK3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using GK1/3 Polyclonal Antibody